REMARKS

Claims 1-5, 8-11, 13-24 and 27-31 are pending in this application. Claims 24 and 28-31 are currently withdrawn. By this Amendment, claims 1 and 24 are amended to further define the presently claimed subject matter. The amendments to claims 1 and 24 are supported at least by original claim 7 and page 9, lines 12-26 of the original specification. Claims 8-11 are amended for antecedent basis and to overcome the claim objections. Claims 7, 26 and 33 are canceled. No new matter is added by this Amendment.

I. Claim Objections

A. Claims 1-5, 7-11, 13-23 And 33

Claims 1-5, 7-11, 13-23 and 33 were objected to because the phrase "terminated with isocyanate groups after removal of the terminal isocyanate groups" allegedly does not limit the claims. For the reasons discussed below, Applicants respectfully traverse the claim objection.

In claim 1, Y_1 is defined as an n-valent moiety of a linear or branched polyurethane prepolymer terminated with isocyanate groups after removal of the terminal isocyanate groups. In other words, Y_1 is defined as a residue of a polyurethane that was once terminated with isocyanate groups, the isocyanate groups having been eliminated during the formation of polymer **B**.

Withdrawal of the objection is requested.

B. Claims 8-9 And 11

Claims 8-9 and 11 were objected to because of informalities.

Applicants have amended claims 8-9 and 11 (and claim 10) to delete the phrase "of formula III" because the formula (III) clearly relates to the NCO-containing compound and not the NCO-reactive polymer.

Withdrawal of the objection is requested.

C. Claim 11

Claim 11 was objected to because diisocyanates recited therein were only identified using chemical abbreviations. In accordance with the Patent Office's suggestion, Applicants have amended claim 11 to recite the full chemical names for the diisocyanates.

Withdrawal of the objection is requested.

II. Rejections Under 35 U.S.C. §103(a)

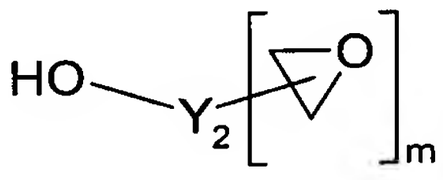
A. Lu In View Of Merz

Claims 1-5, 7-11, 13-17, 19-23 and 33 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,740,192 ("Lu") in view of U.S. Patent Application Pub. No. 2002/0007003 ("Merz"). Applicants respectfully traverse this rejection.

Claims 7 and 33 are canceled, rendering the above rejection moot with respect to these claims.

The Patent Office alleges that the recited term "aromatic moiety" can be defined as any linkage comprising an aromatic compound and thus the "moiety" can be interpreted as the entire alkylene oxide phenol-formaldehyde modified resin. See Office Action, page 4. The Patent Office thus alleges that the entire modified resin of Lu meets the requirements of Ar_1 in formula (IV).

Although Applicants respectfully disagree that the Patent Office's interpretation of the term "moiety" is entirely too broad and unreasonable, Applicants have amended claim 1 to recite the following features: (1) the polymer **B** is obtained from the reaction of a monohydroxyepoxide of the formula (II) and of a linear or branched polyurethane prepolymer terminated with isocyanate groups of the formula (III)



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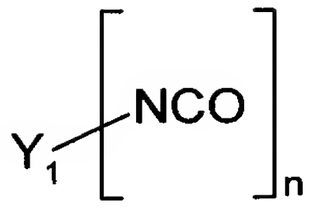


(III);

(2) the polyurethane prepolymer of the formula (III) is obtained from the reaction of at least one polyisocyanate, at least one, optionally substituted, polyphenol and at least one isocyanate-reactive polymer, and (3) the at least one polyphenol is a bisphenol or a trisphenol selected from the group consisting of 1,4-dihydroxybenzene, 1,3-dihydroxybenzene, 1,2-dihydroxybenzene, 1,3-dihydroxytoluene, 3,5-dihydroxybenzoates, 2,2-bis(4-hydroxyphenyl)propane (bisphenol A), bis(4-hydroxyphenyl)methane (bisphenol F), bis(4-hydroxyphenyl) sulfone (bisphenol S), naphthoresorcinol, dihydroxynaphthalene, dihydroxyanthraquinone, dihydroxybiphenyl, 3,3-bis(p-hydroxyphenyl)phthalides, 5,5-bis(4-hydroxyphenyl)hexahydro-4,7-methanoindane, phenolphthalein, fluorescein, 4,4'-[bis(hydroxyphenyl)-1,3-phenylenebis(1-methylethylidene)] (bisphenol M), 4,4'-[bis-(hydroxyphenyl)-1,4-phenylenebis(1-methylethylidene)] (bisphenol P), o,o-diallylbisphenol A, diphenols and dicresols prepared by reacting phenols or cresols with diisopropylidenebenzene, phloroglucinol, gallic ester, phenol novolacs or cresol novolacs having an -OH functionality of from 2.0 to 3.5, and isomers thereof.

In other words, the above features of claim 1 clearly indicate that the aromatic moiety (identified as Ar_1 in formula (IV) of polymer **B**) is introduced by the polyphenol, which is further defined to be one of the bisphenols and trisphenols recited in claim 1. For the reasons discussed below, Lu and Merz would not have rendered obvious at least features (1)-(3) of claim 1.

Lu describes electroconductive materials comprised of electroconductive adhesive containing epoxide modified polyurethanes. See Lu, Abstract. Lu further describes that the epoxide modified polyurethane may be formed from the reaction of a polyalkylene oxide

modified phenol-formaldehyde resin or an active hydrogen containing compound and an isocyanate. See Lu, column 9, lines 32-38.

However, Lu does not describe that the polyalkylene oxide modified phenol-formaldehyde resin of Lu is obtained from the reaction of at least one polyisocyanate, at least one, optionally substituted, polyphenol and at least one isocyanate-reactive polymer, the at least one polyphenol being one of the bisphenols or trisphenols recited in claim 1. Because Lu does not describe the bisphenols or trisphenols recited in claim 1, the polyalkylene oxide modified phenol-formaldehyde resin of Lu is entirely different from the polyurethane prepolymer terminated with isocyanate groups of the formula (III).

Merz does not remedy the deficiencies of Lu. Merz was introduced as allegedly describing a thixotropic agent. However, Merz describe the polyurethane prepolymer terminated with isocyanate groups of formula (III), which is used along with the monohydroxyepoxide of the formula (II) to form polymer **B** of claim 1.

As such, Lu alone or in combination with Merz would not have provided one of ordinary skill in the art with any reason or rationale to have produced polymer **B** of claim 1.

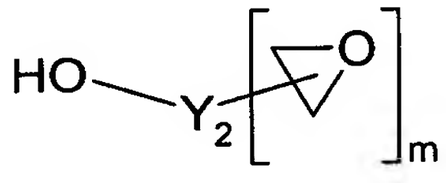
Withdrawal of the rejection is requested.

B. <u>Lu In View Of Merz And In Further View Of Kaji</u>

Claim 18 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Lu in view of Merz, and in further view of WO 02/48235 ("Kaji"). The Patent Office relied upon U.S. Patent No. 6,903,180 as an English-language equivalent of Kaji. Applicants respectfully traverse this rejection.

For the above reasons, Lu and Merz would not have rendered the present claims obvious. Kaji also does not remedy the deficiencies of these references. Kaji was introduced as allegedly describing dicyandiamide as a curing agent. However, Kaji does not describe that (1) the polymer **B** is obtained from the reaction of a monohydroxyepoxide of the formula

(II) and of a linear or branched polyurethane prepolymer terminated with isocyanate groups of the formula (III)



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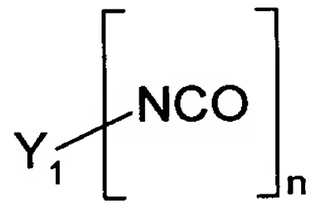


(III);

(2) the polyurethane prepolymer of the formula (III) is obtained from the reaction of at least one polyisocyanate, at least one, optionally substituted, polyphenol and at least one isocyanate-reactive polymer, and (3) the at least one polyphenol is a bisphenol or a trisphenol selected from the group consisting of 1,4-dihydroxybenzene, 1,3-dihydroxybenzene, 1,2-dihydroxybenzene, 1,3-dihydroxytoluene, 3,5-dihydroxybenzoates, 2,2-bis(4-hydroxyphenyl)propane (bisphenol A), bis(4-hydroxyphenyl)methane (bisphenol F), bis(4-hydroxyphenyl) sulfone (bisphenol S), naphthoresorcinol, dihydroxynaphthalene, dihydroxyanthraquinone, dihydroxybiphenyl, 3,3-bis(p-hydroxyphenyl)phthalides, 5,5-bis(4-hydroxyphenyl)hexahydro-4,7-methanoindane, phenolphthalein, fluorescein, 4,4'-[bis(hydroxyphenyl)-1,3-phenylenebis(1-methylethylidene)] (bisphenol M), 4,4'-[bis-(hydroxyphenyl)-1,4-phenylenebis(1-methylethylidene)] (bisphenol P), o,o-diallylbisphenol A, diphenols and dicresols prepared by reacting phenols or cresols with diisopropylidenebenzene, phloroglucinol, gallic ester, phenol novolacs or cresol novolacs having an -OH functionality of from 2.0 to 3.5, and isomers thereof, as recited in claim 1.

As such, Lu, Merz, and Kaji alone or in combination, would not have provided one of ordinary skill in the art with any reason or rationale to have produced polymer **B** in claim 1.

Withdrawal of the rejection is requested.

C. Conclusion

In view of the foregoing amendments and arguments, Applicants respectfully request withdrawal of the 35 U.S.C. §103(a) rejections.

III. Rejoinder

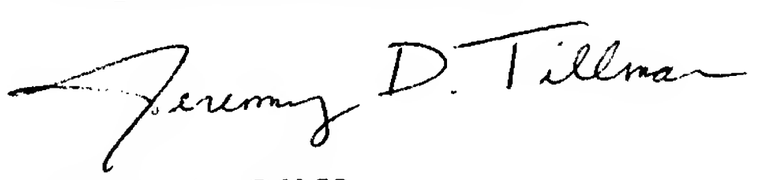
In view of the foregoing amendments and arguments, Applicants respectfully request that upon allowance of claims 1-5, 8-11, 13-23, 27, claims 24 and 28-31 be rejoined with the present application and similarly allowed.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-5, 8-11, 13-24 and 27-31 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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